

What is claimed is:

1. A recording device configured so as to record an image on a record medium according to image data, said recording device comprising:

5 two or more recording parts for recording an image on a record medium,

at least one feeding part for supplying record media to each said recording part, and

a delivering part for holding image-recorded record media
10 delivered from each of said plural recording parts,

wherein said plural recording parts concurrently record images on different record media so that the processing of image data ranging over two or more record media can be shared between said plural recording parts.

15 2. The recording device of claim 1, wherein said delivering part is so configured as to hold record media, which have been image recorded in each of said plural recording parts, in such a way that said image-recorded record media are stacked on top of one another in a
20 specific sequence.

3. The recording device of claim 2, wherein said delivering part includes a bin capable of moving between said plural recording parts to receive thereon record media delivered out of each said recording part, and is
25 configured such that record media, which have been image

recorded in each of said plural recording parts, are stacked on top of one another in a specific sequence on said bin by causing said bin to move in association with the time of completion of the recording of an image in each
5 said recording part.

4. The recording device of claim 2,
said delivering part including:

two or more bins respectively corresponding to said plural recording parts on which record media delivered out
10 of each said recording part are loaded, and

a transferring means for transferring a record medium between said plural bins,

wherein said delivering part is configured such that record media, which have been image recorded in each of
15 said plural recording parts, are loaded on said plural bins corresponding to said plural recording parts, and stacked together, by causing said transferring means to transfer said image-recorded record media onto a specific bin of said plural bins, on top of one another in a specific
20 sequence on said specific bin.

5. The recording device of claim 1, wherein, when any one of said plural recording parts is incapable of recording an image, another one of said plural recording parts capable of image recording records said image on a
25 record medium in place of said faulty recording part.

6. The recording device of claim 1, wherein only one mains plug for supplying electric power to each said recording part is provided.

7. The recording device of claim 6, wherein each said
5 recording part is configured in the form of a unit and is capable of being stacked together on top of one another and wherein each said unit-like recording part is electrically connected to said mains plug when stacked together on top of one another.

10 8. The recording device of claim 6, wherein said plural recording parts are configured such that the timing at which the power consumption of each said recording part increases to a maximum is differed from that of every other recording part by mutual adjustment of the operating timing
15 of recording an image in each said recording part.

9. The recording device of claim 6,

wherein a single power supply switch for switching on and off the supply of electric power to said recording parts is provided, and

20 wherein electric power is supplied to all of said recording parts by switching on said power supply switch.

10. The recording device of claim 6,

wherein two or more power supply switches for switching on and off the supply of electric power to said recording

parts are provided in association with said recording parts,
and

wherein electric power is supplied, by switching on each
said power supply switch, to its corresponding recording
5 part.

11. The recording device of claim 1 further comprising:
a single displaying means for displaying recording part
operating states,

wherein said displaying means is so configured as to
10 display the operating state of all of said recording parts.

12. The recording device of claim 1 further comprising:
two or more displaying means for displaying recording
part operating states, said plural displaying means being
provided in association with said recording parts,

15 wherein each said displaying means is so configured as to
display the operating state of its corresponding recording
part.

13. The recording device of claim 12,

wherein power supply switches for switching on and off
20 the supply of electric power to said recording parts are
provided in association with said recording parts, and

wherein each said displaying means, even when said power
supply switch of its corresponding recording part is
switched off, is so configured as to be able to display the
25 operating state of said corresponding recording part.

14. The recording device of claim 1, wherein said plural recording parts each have two operating modes one of which is a first mode in which said plural recording parts share the processing of image data and the other of which is a second mode in which each said recording part individually processes image data.

15. An ink jet recording device configured so as to record, by emitting ink onto a record medium according to image data, an image on said record medium,

wherein two or more unit-like recording parts, each of which is provided with a recording part having an ink jet head for emitting ink, are stacked together on top of one another in an up and down direction, and

wherein an opening, through which maintenance work is performed on each said unit-like recording part, is formed in a side of each said unit-like recording part.

16. The ink jet recording device of claim 15 further comprising:

an access cover capable of opening and closing said opening of each said unit-like recording part,

wherein each said unit-like recording part is provided with a respective access cover.

17. The ink jet recording device of claim 15 further comprising:

an access cover capable of opening and closing said opening of each said unit-like recording part,

wherein said plural unit-like recording units are provided with a single common access cover.

5 18. The ink jet recording device of claim 15,

wherein each said unit-like recording part is provided with an ink tank for holding ink that is supplied to said ink jet head thereof, and

10 wherein said maintenance work on each said unit-like recording part is the replacement of said ink tank.

19. The ink jet recording device of claim 18,

wherein each said unit-like recording part is provided with a sub tank formed integrally with said ink jet head thereof and a main ink tank connected to said sub tank, and

15 wherein said maintenance work on each said unit-like recording part is the replacement of said main ink tank.

20. The ink jet recording device of claim 15,

20 wherein each said unit-like recording part is provided with a feeding part for accommodating a record medium and for feeding said record medium to said recording part, and

wherein said maintenance work on each said unit-like recording part is the supply of record media to said feeding part.

25 21. An ink jet recording device configured so as to record, by emitting ink onto a record medium according to

image data, an image on said record medium, said ink jet recording device comprising:

two or more recording parts each of which is provided with an ink jet head for emitting ink, and

5 a single ink tank for holding ink that is supplied to each said ink jet head.

22. The ink jet recording device of claim 21,

wherein said plural recording parts are horizontally arranged side by side, and

10 wherein said ink jet heads of said recording parts are positioned at approximately the same height with respect to said ink tank.

23. The ink jet recording device of claim 21,

15 wherein said plural recording parts are stacked together on top of one another in an up and down direction, and

wherein said ink jet recording device further comprises an adjusting means for providing adjustment so that ink suction pressures in said ink jet heads of said plural recording parts become approximately the same.

20 24. The ink jet recording device of claim 23,

wherein said ink jet heads are connected to said ink tank by different supplying tubes,

25 wherein said ink tank is vertically divided into two or more ink chambers corresponding to said supplying tubes and each pair of adjacent ink chambers of said plural ink

chambers are communicated together through a respective switch valve, and

wherein said adjusting means comprises:

mounting holes for said supplying tubes, said mounting
5 holes being positioned in said ink chambers at such heights that vertical distances between said mounting holes and their corresponding ink jet heads are approximately the same, and

said switch valves which are placed in the closed state
10 at least during ink emission in said ink jet head.

25. The ink jet recording device of claim 24, wherein the opening and closing of said switch valves is controlled such that all of said switch valves are not placed in the opened state at the same time during non ink emission in
15 said ink jet head.

26. An ink jet recording device configured so as to record, by emitting ink onto a record medium according to image data, an image on said record medium, said ink jet recording device comprising:

20 two or more recording parts each of which is provided with an ink jet head capable of emitting ink onto a record medium while reciprocating with respect to said record medium,

wherein said plural recording parts are stacked together
25 on top of one another in an up and down direction so that

said ink jet heads of said recording parts can reciprocate in the same direction, and

wherein said recording parts are configured such that said ink jet heads of said recording parts are reciprocated out of phase with respect to each other so as to reduce vibration due to the reciprocating movement of said ink jet heads.

27. The ink jet recording device of claim 26, wherein said recording parts are configured such that, when each said recording part makes no record of images, its corresponding ink jet head is reciprocated, without ink emission, out of phase with respect to the reciprocating movement of the other ink jet heads.

28. A sorter with two or more bins each having an upward loading surface on which a record medium is loaded wherein record media, which have been image recorded in recording parts, are loaded on said different bins so that said record media are sorted, said sorter comprising:

a transferring means for transferring a record medium between said plural bins.

29. The sorter of claim 28,

wherein said plural bins are arranged side by side in an up and down direction, and

wherein said transferring means is so configured as to cause a record medium on said loading surface of each said

bin to drop down for transferring said record medium to another bin directly underlying each said bin.

30. The sorter of claim 29, wherein said transferring means comprises a pair of wall members which are arranged
5 face to face with each other, said pair of wall members being movable so as to switch between a proximity state in which said wall members are brought into close proximity to each other to form said bin loading surface and a clearance
10 state in which said wall members are moved away from each other so as to allow a record medium to drop down.

31. The sorter of claim 29, wherein said transferring means comprises a wall member which is pivotably supported
15 on one side end of each said bin so that said wall member is rotatable so as to switch between a state in which said bin loading surface is formed and a state in which a record medium is allowed to drop down.

32. The sorter of claim 29, wherein said transferring means comprises a pair of wall members which are arranged
20 face to face with each other, said pair of wall members being expandable and contractible so as to switch between an expanded state in which said wall members expand in the direction in which said wall members move toward each other to form said bin loading surface and a contracted state in which said wall members contract in the direction in which

said wall members move away from each other so as to allow a record medium to drop down.

33. The sorter of claim 29, wherein a storing part for storing image-recorded record media is positioned under a lowermost one of said plural bins.

34. The sorter of claim 29, wherein a lowermost one of said plural bins is so configured as to serve also as a storing part for storing image-recorded record media.

35. The sorter of claim 28,

wherein a displaying means is positioned in each said bin or in the vicinity of each said bin, said displaying means displaying an indication that specifies a record medium loaded on said bin loading surface, and

wherein each said displaying means is so configured as to change its display contents in association with the transferring of said record medium.

36. A sorter, in which two or more bins each having an upward loading surface on which a record medium is loaded are arranged side by side, for loading record media, which have been image recorded in recording parts, on said different bins so that said record media are sorted,

wherein said bins are each movably configured so that the order in which said bins are arranged can be changed.

37. The sorter of claim 36, wherein each said bin has a retaining means for retaining a record medium loaded on said bin loading surface during bin movement.

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